

# AUTHOR INDEX TO VOLUME 34

Aléonard, S., see R.Z.D. Fernandes	34 (1989) 253
Andersen, N.H., see L. Nilsson	34 (1989) 111
Angell, C.A., see J. Liu	34 (1989) 87
Angell, C.A. and J. Zhou, Effect of pressure on conductivity in liquid and glassy states of a superionic conducting glass	34 (1989) 243
Asai, T., S. Kawai, H. Yumoto and S. Takagi, Effect of surface modification with an alkali or alkaline earth cation upon the composite solid electrolyte of lithium iodide and alumina	34 (1989) 195
Aviani, I., see M. Horvatić	34 (1989) 21
Barboux, P. and J. Livage, Ionic conductivity in fibrous $\text{Ce}(\text{HPO}_4)_2 \cdot (3+x)\text{H}_2\text{O}$	34 (1989) 47
Barth, St. and A. Feltz, Structure and ionic conduction in solids. VII. Ion conducting glasses in the system $\text{Na}_2\text{O}-\text{Nb}_2\text{O}_5-\text{P}_2\text{O}_5$	34 (1989) 41
Bates, J.B., see N.J. Dudney	34 (1989) 53
Battut, J.P., see C. Forano	34 (1989) 7
Besse, J.P., see C. Forano	34 (1989) 7
Boukamp, B.A., see I.C. Vinke	34 (1989) 235
Brach, I., D.J. Jones and J. Rozière, Acid sulphates of trivalent metals: a new class of protonic conductors	34 (1989) 181
Bray, P.J., see D.E. Hintenlang	34 (1989) 207
Burggraaf, A.J., see I.C. Vinke	34 (1989) 235
Caillet, M., see A. Skalli	34 (1989) 261
Cameron, G.G., J.L. Harvie and M.D. Ingram, The steady state current and transference number measurements in polymer electrolytes	34 (1989) 65
Cappelletti, R.L., see P.K. Lemaire	34 (1989) 69
Chacón, M., see R.A. Vargas	34 (1989) 93
Chen, L.-Q., see R. Xue	34 (1989) 231
Chioba, E.R., see T.A. Kuku	34 (1989) 141
Chiodelli, G., see T.A. Kuku	34 (1989) 141
Chippindale, A.M., see P.G. Dickens	34 (1989) 79
Chiranjivi, T., see S. Narendar Reddy	34 (1989) 73
Colombet, P., see P. Le Bail	34 (1989) 127
De Vries, K.J., see I.C. Vinke	34 (1989) 235
Dickens, P.G., A.M. Chippindale and S.J. Hibble, Ion insertion reactions at a vanadium pentoxide cathode	34 (1989) 79
Dissanayake, M.A.K.L., Solid state cells with mixed polycrystalline $\text{CuCl}-\text{CuCNS}$ electrolyte and $\text{Mg}/\text{Cu}$ electrodes	34 (1989) 257
Dudney, N.J. and J.B. Bates, Ion exchange reaction of silver and sodium $\beta$ "-alumina in molten mercury salts	34 (1989) 53
Dupuis, J., see C. Forano	34 (1989) 7

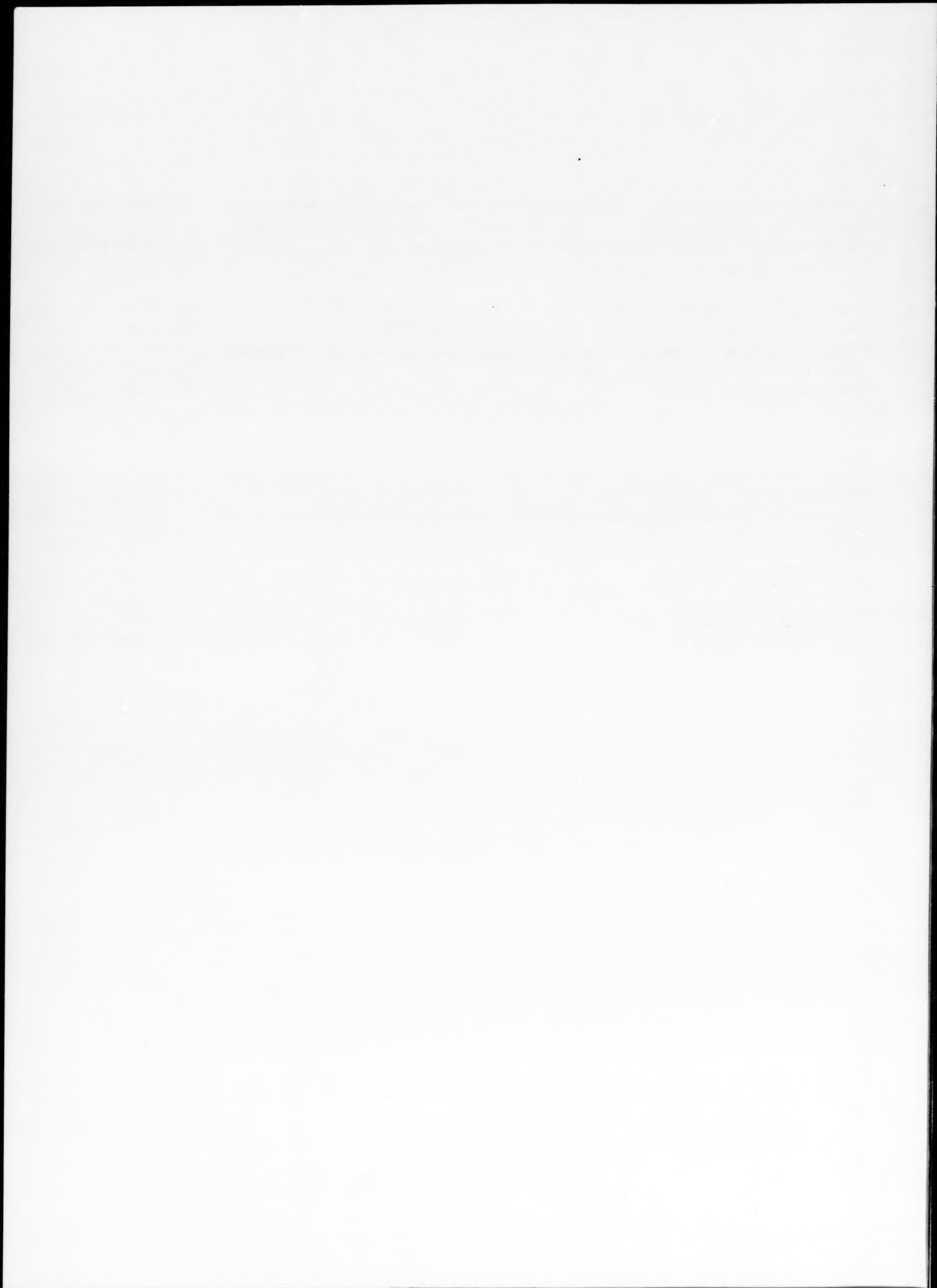
- Eckert, J., see W.S. Glaunsinger 34 (1989) 281
- Ermolenko, Yu.E., see Yu.G. Vlasov 34 (1989) 157
- Esaka, T., K. Okuyama and H. Iwahara, Ionic conduction in sintered fluorocomplexes  $\text{Li}_m\text{MF}_6$ ,  $\text{M}=\text{Al}, \text{Ti}$  34 (1989) 201
- Esaka, T., Y. Kobayashi, H. Obata and H. Iwahara, Cation conduction in zircon-type solid solution based on  $\text{YPO}_4$  34 (1989) 287
- Feltz, A., see St. Barth 34 (1989) 41
- Fernandes, R.Z.D., S. Aléonard, J. Ilali, A. Hammou and M. Kleitz, An ionic rectifying contact 34 (1989) 253
- Forano, C., J.P. Besse, J.P. Battut, J. Dupuis and A. Hajjimohamad,  $^1\text{H}$  NMR and conductivity studies of protonic conductors  $\text{HSbO}_3 \cdot n\text{H}_2\text{O}$  and  $\text{SnO}_2 \cdot n\text{H}_2\text{O}$  34 (1989) 7
- Gallerie, A., see A. Skalli 34 (1989) 261
- Glasse, M.D., see M.H. Sheldon 34 (1989) 135
- Glaunsinger, W.S., see M.J. McKelvy 34 (1989) 211
- Glaunsinger, W.S., see G.W. O'Bannor 34 (1989) 215
- Glaunsinger, W.S., M.J. McKelvy, E.M. Larson, R.B. Von Dreele, J. Eckert and N.L. Ross, Incoherent inelastic neutron scattering investigation of ammoniated titanium disulfide 34 (1989) 281
- Glazunov, S.V., see Yu.G. Vlasov 34 (1989) 157
- Greenbaum, S.G., see D.E. Hintenlang 34 (1989) 207
- Greenbaum, S.G., see R.E. Stark 34 (1989) 275
- Hajjimohamad, A., see C. Forano 34 (1989) 7
- Hammou, A., see R.Z.D. Fernandes 34 (1989) 253
- Harvie, J.L., see G.G. Cameron 34 (1989) 65
- Hibble, S.J., see P.G. Dickens 34 (1989) 79
- Hintenlang, D.E., E.J. Holupka, P.J. Bray and S.G. Greenbaum,  $^{27}\text{Al}$  NMR study of mixed alkali effects in  $\beta$ -alumina 34 (1989) 207
- Holupka, E.J., see D.E. Hintenlang 34 (1989) 207
- Horvatić, M., I. Aviani and M. Ilić, Two-point dc ionic conductivity measurements in the superionic phase of  $\text{Cu}_{2-x}\text{Se}$  34 (1989) 21
- Hunter, E.R., see P.K. Lemaire 34 (1989) 69
- Ilali, J., see R.Z.D. Fernandes 34 (1989) 253
- Ilić, M., see M. Horvatić 34 (1989) 21
- Inganäs, O., see P. Passiniemi 34 (1989) 225
- Ingram, M.D., see G.G. Cameron 34 (1989) 65
- Iwahara, H., see H. Uchida 34 (1989) 103
- Iwahara, H., see T. Esaka 34 (1989) 201
- Iwahara, H., see T. Esaka 34 (1989) 287
- Jacob, K.T. and S.K. Ramasesha, Design of temperature-compensated reference electrodes for non-isothermal galvanic sensors 34 (1989) 161
- Jacob, K.T., K. Swaminathan and O.M. Sreedharan, Stability constraints in the design of galvanic cells using composite electrolytes and auxiliary electrodes 34 (1989) 167
- Jacob, K.T., see G.M. Kale 34 (1989) 247

- Jones, D.J., see I. Brach 34 (1989) 181
- Julien, C. and M. Massot, Annealing studies of fast ion conducting glasses by FTIR microscopy 34 (1989) 269
- Kale, G.M. and K.T. Jacob, Phase relations and thermodynamic properties of compounds in the pseudobinary system BaO-Y<sub>2</sub>O<sub>3</sub> 34 (1989) 247
- Kaneko, H., see H. Taimatsu 34 (1989) 25
- Kawagoe, M., see H. Taimatsu 34 (1989) 25
- Kawai, S., see T. Asai 34 (1989) 195
- Kleitz, M., see R.Z.D. Fernandes 34 (1989) 253
- Kobayashi, Y., see T. Esaka 34 (1989) 287
- Kolodnikov, V.V., see Yu.G. Vlasov 34 (1989) 157
- Kuku, T.A., G. Chiodelli and E.R. Chioba, Electrical properties of CuPbBr<sub>3</sub> 34 (1989) 141
- Labidi, F., J. Morcos and J. Salardenne, Study of the electrical properties of LaF<sub>3</sub> thin films 34 (1989) 1
- Larson, E.M., see W.S. Glaunsinger 34 (1989) 281
- Latham, R.J., see M.H. Sheldon 34 (1989) 135
- Le Bail, P., P. Colombet and J. Rouxel, Synthesis and properties of new intercalates Eu<sub>x</sub>ZrSe<sub>1.95</sub> 34 (1989) 127
- Lemaire, P.K., E.R. Hunter and R.L. Cappelletti, A new mixed conductor: Ag<sub>x</sub>CS<sub>2</sub> 34 (1989) 69
- Linford, R.G., see M.H. Sheldon 34 (1989) 135
- Liu, J., J. Portier, B. Tanguy, J.-J. Videau and C.A. Angell, Glass formation and conductivity in the Ag<sub>2</sub>S-AgPO<sub>3</sub> system: evidence against cluster pathway mechanisms for high ionic conductivity 34 (1989) 87
- Livage, J., see P. Barboux 34 (1989) 47
- Lundén, A., see L. Nilsson 34 (1989) 111
- Marzke, R.F., see G.W. O'Bannor 34 (1989) 215
- Massot, M., see C. Julien 34 (1989) 269
- McKelvy, M.J. and W.S. Glaunsinger, On the synthesis, stability and characterization of ammoniated and metal-ammoniated transition metal disulfide intercalation compounds 34 (1989) 211
- McKelvy, M.J., see G.W. O'Bannor 34 (1989) 215
- McKelvy, M.J., see W.S. Glaunsinger 34 (1989) 281
- Morcos, J., see F. Labidi 34 (1989) 1
- Musinu, A., G. Paschina, G. Piccaluga and G. Pinna, Towards a model of silver halide-silver oxysalt glassy electrolytes 34 (1989) 187
- Narender Reddy, S., A. Sadananda Chary, K. Saibabu and T. Chiranjivi, Enhancement of dc ionic conductivity in dispersed solid electrolyte system - Sr(NO<sub>3</sub>)<sub>2</sub>:γ-Al<sub>2</sub>O<sub>3</sub> 34 (1989) 73
- Nazri, G., Preparation, structure and ionic conductivity of lithium phosphide 34 (1989) 97
- Nilsson, L., N.H. Andersen and A. Lundén, The structure of the solid electrolyte LiAgSO<sub>4</sub> at 803 K and of LiNaSO<sub>4</sub> at 848 K 34 (1989) 111
- O'Bannor, G.W., M.J. McKelvy, W.S. Glaunsinger and R.F. Marzke, Structure and dynamics of ammonia in Li-ammonia intercalated TiS<sub>2</sub>: a proton NMR study, Solid State Ionics 32/33 (1989) 167. Erratum 34 (1989) 215
- Obata, H., see T. Esaka 34 (1989) 287
- Okano, Y., see M. Yoshimura 34 (1989) 61
- Okuyama, K., see T. Esaka 34 (1989) 201



- Pak, Y.S., see R.E. Stark 34 (1989) 275  
Paschina, G., see A. Musinu 34 (1989) 187  
Passiniemi, P. and O. Inganäs, Modelling of polymer batteries 34 (1989) 225  
Piccaluga, G., see A. Musinu 34 (1989) 187  
Pinna, G., see A. Musinu 34 (1989) 187  
Portier, J., see J. Liu 34 (1989) 87
- Quintana, P., F. Velasco and A.R. West, Lithium ion conducting solid solutions in the system  $\text{Li}_2\text{O}-\text{Ga}_2\text{O}_3-\text{SiO}_2$  34 (1989) 149
- Ramasesha, S.K., see K.T. Jacob 34 (1989) 161  
Ross, N.L., see W.S. Glaunsinger 34 (1989) 281  
Rouxel, J., see P. Le Bail 34 (1989) 127  
Rozière, J., see I. Brach 34 (1989) 181
- Sadananda Chary, A., see S. Narender Reddy 34 (1989) 73  
Saibabu, K., see S. Narender Reddy 34 (1989) 73  
Salardenne, J., see F. Labidi 34 (1989) 1  
Seshan, K., see I.C. Vinke 34 (1989) 235  
Sheldon, M.H., M.D. Glasse, R.J. Latham and R.G. Linford, The effect of plasticiser on zinc polymer electrolytes 34 (1989) 135  
Skalli, A., A. Gallerie and M. Caillet, Thermal corrosion of a chromium-molybdenum steel by  $\text{SO}_2$ . Kinetic, thermodynamic and morphological aspects 34 (1989) 261  
Smayling, M.C., VLSI CMOS technology for low power sensor applications 34 (1989) 121  
Sōmiya, S., see M. Yoshimura 34 (1989) 61  
Sreedharan, O.M., see K.T. Jacob 34 (1989) 167  
Stark, R.E., S.G. Greenbaum and Y.S. Pak,  $^{13}\text{C}$  NMR studies of poly(propylene oxide) complexed with alkali iodides 34 (1989) 275  
Stoch, A. and J. Stoch, XPS studies of chemical interaction between modified phosphate coatings and iron 34 (1989) 17  
Stoch, J., see A. Stoch 34 (1989) 17  
Swaminathan, K., see K.T. Jacob 34 (1989) 167
- Taimatsu, H., H. Kaneko and M. Kawagoe, Amperometric determination of reducing gas amounts in argon by an oxygen pump-gauge 34 (1989) 25  
Takagi, S., see T. Asai 34 (1989) 195  
Tanguy, B., see J. Liu 34 (1989) 87  
Trochez, J.C., see R.A. Vargas 34 (1989) 93
- Uchida, H., H. Yoshikawa and H. Iwahara, Formation of protons in  $\text{SrCeO}_3$ -based proton conducting oxides. Part I. Gas evolution and absorption in doped  $\text{SrCeO}_3$  at high temperature 34 (1989) 103
- Valverde-Diez, N. and J.B. Wagner Jr., Electronic conduction in  $\text{AgI}(\text{Al}_2\text{O}_3)$  composites 34 (1989) 175  
Vargas, R.A., M. Chacón and J.C. Trochez, Specific heat of KDP near the tetragonal-monoclinic phase transition 34 (1989) 93  
Velasco, F., see P. Quintana 34 (1989) 149

- Videau, J.-J., see J. Liu 34 (1989) 87
- Vinke, I.C., K. Seshan, B.A. Boukamp, K.J. de Vries and A.J. Burggraaf, Electrochemical properties of stabilized  $\delta$ - $\text{Bi}_2\text{O}_3$ . Oxygen pump properties of  $\text{Bi}_2\text{O}_3$ - $\text{Er}_2\text{O}_3$  solid solutions 34 (1989) 235
- Vlasov, Yu.G., Yu.E. Ermolenko, S.V. Glazunov and V.V. Kolodnikov, Diffusion of silver and ionic conductivity in the solid electrolytes  $\text{Ag}_2\text{HgS}_2\text{I}_6$  and  $\text{Ag}_6\text{I}_4\text{WO}_4$  34 (1989) 157
- Von Dreele, R.B., see W.S. Glaunsinger 34 (1989) 281
- Wagner Jr., J.B., see N. Valverde-Diez 34 (1989) 175
- Wang, D., W. Yu and B. Zhu, A special solid electrolyte - montmorillonite 34 (1989) 219
- Watanabe, A., Phase relations of hexagonal and cubic phases in holmia-doped bismuth sesquioxide,  $\text{Bi}_{2-2x}\text{Ho}_{2x}\text{O}_3$  ( $x=0.205-0.245$ ) 34 (1989) 35
- West, A.R., see P. Quintana 34 (1989) 149
- Xiao, C., see R. Xue 34 (1989) 231
- Xue, R., L.-Q. Chen and C. Xiao, Study in anticorrosion of metal through using  $\text{Na-}\beta\text{-Al}_2\text{O}_3$  34 (1989) 231
- Yoshikawa, H., see H. Uchida 34 (1989) 103
- Yoshimura, M., Y. Okano and S. Sōmiya, Stability regions of cubic and tetragonal phases in the system  $\text{ZrO}_2$ - $\text{YF}_3$ - $\text{YO}_{1.5}$  34 (1989) 61
- Yu, W., see D. Wang 34 (1989) 219
- Yumoto, H., see T. Asai 34 (1989) 195
- Zhou, J., see C.A. Angell 34 (1989) 243
- Zhu, B., see D. Wang 34 (1989) 219



## SUBJECT INDEX TO VOLUME 34

- Ac calorimetry, 93  
Aluminosilicate, 219  
Ammonia, 211  
Ammoniated titanium disulfide, 281  
Amorphous cluster, 187  
Amperometric measurements, 25  
Antimonic acid, 7  
Aqueous electrolyte, 79
- Battery, 219  
    modelling, 225  
    polymer, 225  
 $\beta'$ -alumina, 207, 231  
    mercury, 53  
Bismuth oxide, 35
- Cell characteristics, 257  
Cerium phosphate, 47  
Clay, 219  
Cluster pathway mechanisms, 87  
 $^{13}\text{C}$  NMR, 275  
CMOS (Complementary Metal Oxide Semiconductor)  
    technology, 121  
Complex impedance, 47  
Composite electrolytes, 167, 175, 195, 247  
Copper selenide mixed conductor, 21  
Corrosion, 17, 231, 261
- Diffuse scattering, 111  
Diffusion coefficient, 69, 157  
Dispersed Solid Electrolyte System (DSES), 73  
Dispersoid, 73
- Electrochemistry, 235  
Electrode  
    temperature compensated, 161  
Electrolysis, 201  
Electronic conductivity, 141, 175  
Ellingham diagrams, 167
- FTIR, 269
- Glass, 41, 187, 243, 269  
Glass formation, 87
- Host matrix, 73  
Hydrated ions, 219
- IINS (Incoherent Inelastic Neutron Scattering), 281  
Intercalation, 127, 211  
Interface, 73  
    polarisation, 253  
Ion exchange, 53  
Ion insertion, 79  
Ionic conductivity, 21, 65  
    calcium, 287  
    lithium, 97, 149, 195, 201, 269, 287  
    lithium gallium silicate, 149  
    oxygen, 35  
    proton, 7, 47, 103, 181  
    silver, 69, 87, 157, 187  
    sodium, 41  
    zinc, 135  
Ionic contact, 253  
Ionic thermocurrents, 1  
IR spectroscopy, 181
- KDP, 93
- Lanthanum fluoride, 1  
Lithium aluminum fluoride, 201  
Lithium phosphide, 97  
Lithium titanium fluoride, 201
- Magnetic susceptibility, 127  
Mixed electrolyte, 257  
Mixed ions, 207  
Mössbauer spectroscopy, 127
- Neutron diffraction, 111  
NMR, 207, 211  
Nobel metals, 235  
Nonstoichiometry, 21
- Oxygen exchange rates, 235  
Oxygen pump gauge, 25  
Oxygen pump rates, 235
- Paddle-wheel mechanism, 111  
Phase relations, 247  
Phase stability, 35  
Phase transition, 93  
Phosphate coating, 17  
Plasticiser, 135  
Polyethylene oxide, 135

Polymer electrolytes, 275  
Polymeric lithium conductivity, 65  
Poly(propylene)oxide, 275  
Pressure effects, 243  
Pyrochlore, 7

Sensors, 1, 121, 161, 167  
Silver carbon sulfide, 69  
Silver halide, 187  
Silver iodide, 175, 243  
Silver phosphate, 243  
Solid electrolytes, 207  
Solid polymer electrolytes, 225  
Solid state cell, 257  
Steel, 261  
Strontium cerium oxide, 103  
Sulfate  
  layer structure, 181  
Sulfur dioxide, 261  
Surface films, 231  
Surface modification, 195

Thermal analysis, 141  
Thermodynamics, 53, 61, 103, 161, 167, 247  
Thin films, 1  
Titanium disulfide, 211  
Transference number, 65, 141

Vanadium pentoxide electrode, 79

X-ray  
  structure, 121, 141  
  study, 111  
XPS, 17

Yttrium fluoride, 61  
Yttrium oxide, 61  
Yttrium phosphate, 287

Zirconia, 61, 161  
Zirconia electrode, 25  
Zirconium selenide, 127



